

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF MD 349 AND PARSONS ROAD IN WICOMICO COUNTY. MD 349 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

CONTROLLER OPERATION

AN EIGHT-PHASE, FULLY ACTUATED NEMA CONTROLLER WITH TWO, 4-CHANNEL TIME-DELAY-OUTPUT, HOUSED IN A BASE MOUNTED CABINET WILL BE INSTALLED AT THE INTERSECTION.

THE CONTROLLER WILL OPERATE AS A FOUR PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER.

CONTACT PERSONS FOR DISTRICT 1 ARE AS FOLLOWS:

MR. DONNIE DREWER  
DISTRICT ENGINEER  
(410) 543-6715

MR. BRUCE POOLE  
ASSISTANT DISTRICT ENGINEER - UTILITIES  
(410) 543-6715

MR. GENE COFIELL  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
(410) 543-6715

MR. JAMES WRIGHT  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
(410) 543-6715

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
(410) 787-7630

MR. EUGENE BAILEY  
TEAM LEADER SIGN OPERATIONS  
(410) 787-7676

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF,  
TRAFFIC OPERATIONS  
(410) 787-7631

MR. DAVID SCHWARTZ  
SUPPLY OFFICE IV (SIGNAL SHOP WAREHOUSE)  
(410) 787-7668

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
(410) 787-7652

EQUIPMENT LIST "A"

B. EQUIPMENT TO BE FURNISHED BY SHA AND INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	3 CY	TEST PIT EXCAVATION
5004	50 LF	FURNISH AND INSTALL 24 IN. HEAT APPLIED PERMANENT PREFORM THERMOPLASTIC PAVEMENT MARKING
8001	13 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8002	2 EA	ADJUST EXISTING HANDHOLE TO GRADE
8006	3 EA	CLEAN, CUT, GALVANIZE AND CAP MAST ARM
8017	4 EA	FURNISH AND INSTALL NON-EVASIVE MICRO-LOOP PROBE WITH 1000 FT. LEAD-IN
8021	260 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8023	50 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8024	10 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8027	130 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8030	330 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8032	340 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT-BORED
8033	8 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	4 EA	FURNISH AND INSTALL GROUND ROD - 3/4" X 10'
8036	2 EA	FURNISH AND INSTALL CONNECTOR KIT - TYPE 2
8039	850 LF	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)
8040	870 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)

EQUIPMENT LIST "B" CONTINUED

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
8041	260 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8044	100 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8045	800 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8046	160 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
8048	290 LF	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8049	45 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR (NO. 4 A.W.G.) THHN/THWN
8051	34 LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 IN. X 6 IN.
8055	1 EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8056	1 EA	FURNISH AND INSTALL 15 FT. LIGHTING BRACKET ARM FOR TRAFFIC SIGNAL STRUCTURE
8060	1 EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
8066	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
8081	2 EA	FURNISH AND INSTALL MAST ARM POLE AND TWIN 50 FT./60 FT. MAST ARMS
----	8 EA	FURNISH AND INSTALL 12 IN., ONE-WAY, THREE-SECTION (R.Y.G.) VEHICLE TRAFFIC SIGNAL HEAD - MAST ARM MOUNT
----	2 EA	FURNISH AND INSTALL W3-3 SIGN (48 IN. X 48 IN.) WITH NEW PANEL- GROUND MOUNT
----	1 EA **	FURNISH AND INSTALL BASE MOUNTED CABINET AND CONTROLLER
----	2 EA	FURNISH AND INSTALL FOUR CHANNEL TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER
----	1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "NORTH/MD 349/ LT. ARROW" (36 IN. X 75 IN.) - GROUND MOUNT
----	1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "SOUTH/MD 349/ RT. ARROW" (24 IN. X 51 IN.) - GROUND MOUNT
----	1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "SOUTH/MD 349/ LT. ARROW" (36 IN. X 75 IN.) - GROUND MOUNT
----	1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "NORTH/MD 349/ RT. ARROW" (24 IN. X 51 IN.) - GROUND MOUNT
----	2 EA	FURNISH AND INSTALL D3-2 DUAL FACE "PARSONS RD" SIGN (VAR. X 16 IN.) - MAST ARM MOUNT
----	750 LF	REMOVE AND RE-INSTALL EXISTING CABLE
----	1 EA *	RELOCATE EXISTING STREET LIGHT

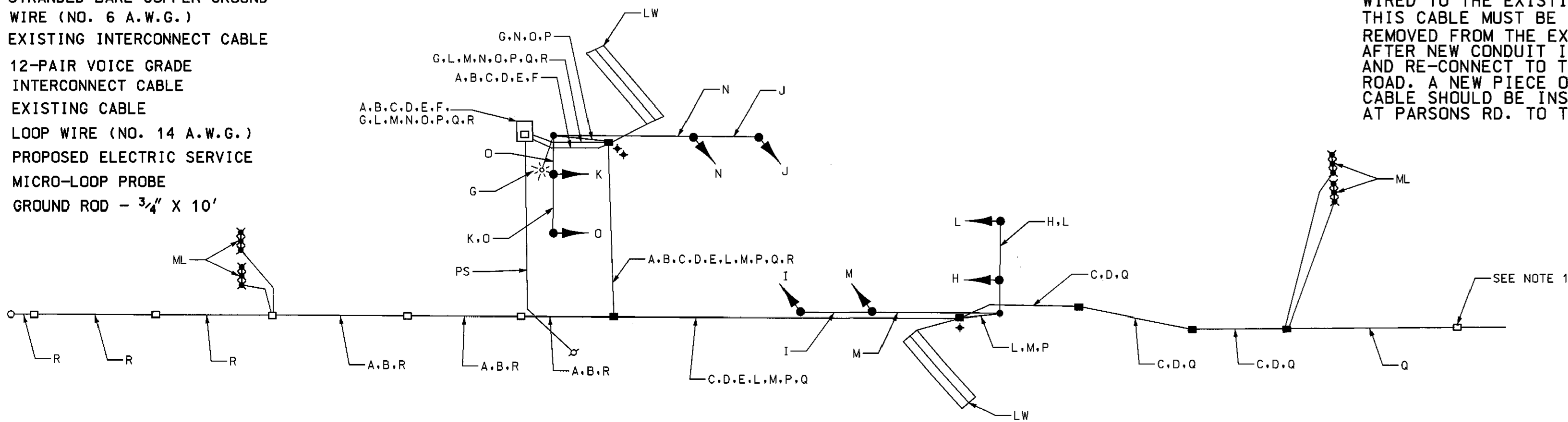
\* - INCLUDES NEW ANCHOR BOLTS

\*\* - CONTROLLER AND CABINET TO BE DELIVERED TO SHA SIGNAL SHOP 7491 CONNELLEY DRIVE, HANOVER, MD. ONE WEEK PRIOR TO INSTALLATION FOR WIRING AND TESTING. CONTACT MR. ED RODENHIZER AT (410) 787-7650.

WIRING DIAGRAM

WIRING KEY

- A-D MICRO-LOOP PROBE
- E-F 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
- G 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- H-K 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- L-O 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- P STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- Q EXISTING INTERCONNECT CABLE
- R 12-PAIR VOICE GRADE INTERCONNECT CABLE
- EC EXISTING CABLE
- LW LOOP WIRE (NO. 14 A.W.G.)
- PS PROPOSED ELECTRIC SERVICE
- ML MICRO-LOOP PROBE
- ⬤ GROUND ROD - 3/4" X 10'



NOTE:  
1. HAZARD IDENTIFICATION BEACON (H.I.B.) EXISTS APPROXIMATELY 750 FT SOUTH OF THE INTERSECTION AND IS WIRED TO THE EXISTING CONTROLLER AT US 50 AND MD 349. THIS CABLE MUST BE DISCONNECTED FROM THE H.I.B. AND REMOVED FROM THE EXISTING CONDUIT TO THIS HANDHOLE AFTER NEW CONDUIT IS INSTALLED. RE-INSTALL THE CABLE AND RE-CONNECT TO THE PROPOSED CONTROLLER AT PARSONS ROAD. A NEW PIECE OF 12-PAIR VOICE GRADE INTERCONNECT CABLE SHOULD BE INSTALLED FROM THE PROPOSED CONTROLLER AT PARSONS RD. TO THE EXISTING H.I.B.

PHASE CHART

	1	2	3	4	5	6	7	8
	(R)	(Y)	(G)	(R)	(Y)	(G)	(R)	(Y)
PHASE 2 & 6	G	G	G	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R
PHASE 4 & 8	R	R	R	R	G	G	G	G
4 & 8 CHANGE	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
GENERAL INFORMATION SHEET  
MD 349 AND PARSONS ROAD

DRAWN BY: T.M.Z	F.A.P. NO.	TS NO.	SHEET NO.
CHECKED BY: K.W.S	S.H.A. NO.	4102 GI	
SCALE: NONE	COUNTY: WICOMICO	T.I.M.S. NO.	
DATE: 3-15-01	LOG MILE:	E465	